

REMARKS

Claims 1-4 are pending in this application.

By this Amendment, independent claim 1 is amended to incorporate features from independent claim 4. Also, independent claim 4 is amended to incorporate features from independent claim 1. Support to the amendments may be found in the specification at paragraph [0036], Table 2 and the originally filed claims.

The specification is amended to correct a typographical error. Support to the amendments to the specification may be found in the originally filed specification at, for example, paragraph [0033].

No new matter is added. Reconsideration of the application is respectfully requested.

The Office Action rejects claims 1 and 2 under 35 U.S.C. §102(b) over U.S. Patent No. 5,914,187 to Naruse; rejects claim 4 under 35 U.S.C. §102(b) over U.S. Patent No. 6,099,671 to Pearson; and rejects claim 3 under 35 U.S.C. §103(a) over Naruse in view of U.S. Patent Application Publication No. 2003/0151155 to Muroi and Pearson. These rejections are respectfully traversed.

The Office Action asserts that Naruse discloses all features recited in claim 1. Claim 1 is amended to recite additional features, as outlined above. In particular, claim 1 is amended to recite "the plurality of honeycomb segments, after being bonded, having been heat treated at a temperature of 400 to 1200°C."

This added "heat treatment" feature imports structural features to the subject matter recited in claim 1. The applied references do not disclose or render obvious the subject matter recited in claim 1, as amended.

For example, Muroi does not disclose such a heat treatment feature in combination with the other features, such as the "three-point ending strength" and "shearing strength" features recited in claim 1. Muroi only discloses controlling the porosity and pore diameter for obtaining

desired porous body by adding foamed resin as a pore forming agent, which is a conventional usage of a foamed resin as a component of a honeycomb body. On the other hand, in the present application, the wettability is attained due to a satisfactory ductility with low rigidity of Young's modulus by adding foamed resin to component of the bonding layer, as is described in paragraph [0034] of the present specification. Therefore, the foamed resin in Muroi is irrelevant to the present application in its object and function to the ones disclosed in the present specification.

Regarding claim 4, the Office Action asserts that Pearson discloses ceramic foam, and heat treatment at temperatures between 1000 and 2000°F (corresponding to the temperature range recited in claim 4 in Celsius). The Office Action further asserts that the honeycomb structure recited in claim 4 is ceramic foam.

However, ceramic foam does not disclose a honeycomb structure with the recited partition walls and cells. In particular, the disclosure of Pearson does not touch on "partition," "cells" or "honeycomb." Thus, Pearson does not disclose or render obvious the subject matter recited in claim 4.

In the interest for expediting prosecution, claim 4 is amended to incorporate features, such as the "three-point bending strength" and "shearing strength" features, from claim 1. Claim 4, as amended, further distinguishes Pearson's disclosure.

For example, Pearson discloses that the ceramic foams and ceramic fiber are impregnated to a liquid resin to obtain the bonded volume (the void volume). This bonded volume is pyrolysed at a temperature between 1000 to 2000 degrees F to attain a strength due to a bonding force of ceramized resin, as is described in col. 3, lines 44-52 of Pearson. The bonding resin of Pearson is filled into the whole of the ceramic foam. In this respect, the heat transference in ceramic foam is in comparable to those in a honeycomb structure, since a honeycomb structure has a plurality of cells and partitions. Therefore, the disclosed range of


temperature in Pearson does not reach to those claimed in amended claim 1 due to the differences in the materials and constructions made of the materials.

For at least the above reasons, the applied references, individually or in combination, do not disclose or render obvious the subject matter recited in claims 1 and 4, as amended. Also, claims 2 and 3 are patentable at least in view of the patentability of claim 1, from which they depend, as well as for additional features they recite. Accordingly, withdrawal of the rejection of claims 1-4 under 35 U.S.C. §102(b) and §103(a) is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-4 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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